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THE EXTENSION POULTRY HUSBANDMAN

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STATE AND COUNTY ORGANIZATIONS FOR CARRYING ON A POULTRY EXTENSION PROGRAM*

By
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I fully realize that what I may say about the extension organization in Connecticut may not apply in other States where the poultry industry is not similarly developed, or where one specialist has to serve a much larger territory. In spite of this acknowledgement I am going to relate my own experience, hoping that it may be of some help to others.

As I review my past experience in poultry extension work, my thoughts go back to the spring of 1914 when State extension work with specialists in different lines of activity was started in Connecticut. I shall not attempt to tell you how many States had organized poultry extension work in progress at that time, but they were very few in number.

My first extension work was largely farm-visit work in response to calls for personal assistance. This was a very definite help in getting acquainted with existing problems and laying the foundation for the work that followed.

Testing for pullorum disease was the first organized program coming under my supervision with a tester devoting full time to that type of work. I had, during the previous year, done considerable pullorum-disease testing as a worker at the Storrs Experiment Station.

I would like to list a few of the more important extension programs, organized from that time on, which had a very definite effect on the development of poultry extension work in Connecticut, and may have had some influence outside. The first State-wide slacker-hen campaign was organized in 1916. The first thousand-dollar poultry club was organized in 1918.

Connecticut started the policy of conducting State poultry field trips in 1919. The first poultry calendar and home egg-laying contest was started in 1919. Adult poultry-record clubs were organized in 1919. Disease-control demonstration farms were conducted in 1924 and 1925, laying the foundation for the grow-healthy-chicks program which was started in 1926 and which will be summarized in the ten-year summary at the close of this season.

*Presented at Poultry Science Assn. meeting, August 1935.

R. O. P. work was started in 1927. Chicken-pox vaccination work was first started in 1920, but it was not until 1929 that a State-wide chicken-pox vaccination program was started. A more-eggs-per-bird program was started in 1929; an egg-quality program in 1932. A reduce-hen-mortality program was started in 1933. During the present year a poultry-efficiency program and a poultry-tattooing program are being organized.

During the early period most of the extension work was carried on through local or town committees. Slacker-hen demonstrations and adult poultry-record clubs were local in nature. This type of contact was very desirable but it required a tremendous number of meetings and a great deal of time. When better roads were built and the automobile became a necessity rather than a luxury, this type of organization changed.

County poultry committees were appointed and these committees were asked to assist in formulating the county poultry program. The first committees consisted of only five or six leading poultrymen. This made a very satisfactory type of committee with which to work, but, in my opinion, the most effective committee is one which includes a representative poultryman from each town in the county, each man representing the needs of his community and being responsible for carrying the extension program back to his town.

In order to have an active county poultry committee it is necessary that it be given definite responsibility and something to do. There are two methods of procedure that have been tried that I would like to present.

One is to place the responsibility of choosing an extension program suitable to meet the needs of the county on the county poultry committee, definitely scheduling a series of meetings and demonstrations and preparing the publicity in the counties independent of work carried on in any other county. This type of program, with the responsibility of handling different parts of the work definitely assigned to different members of the committee, builds a strong county organization and is effective from the standpoint of work organized within the county, but it means that the extension poultryman may have as many different lines or schedules of activity as he has counties in which to work.

The second procedure is to combine the needs expressed by all the county committees, study the situation from the standpoint of the States and the industry as a whole, and work out a State program which may be taken back to each county agent and county poultry committee where it is worked in as part of the county poultry program.

The advantage of a unified State program covering major activities as compared with a large number of individual county programs is obvious. The State program demands and offers an opportunity for much better preparation of material and better and more complete publicity. The program gathers momentum as it is carried from county to county and the measure of results accomplished after the work is completed is much more accurate and more convincing. Practically all the effective pieces of poultry extension work in Connecticut have been carried on through programs of this type.

Another very effective way of launching a program in a State such as Connecticut, where we have an active State poultry association, is to have the State association appoint a special committee to study a particular problem. The foundation of the State program can be developed through working with this committee as a recommendation of the State association. This program is, in turn, "sold" to the county agent and the county poultry committee of the Farm Bureau.

With this set-up, the combined activities of the State poultry association, the extension service and the county poultry committees, with each member representing his individual town, makes a very effective organization for reaching the greater part of the poultrymen in the State.

During the period of change in the organization of extension work, there has been a very definite change in the types of meetings held. As the work developed and spread to new areas, it was absolutely impossible to continue with the small and local meetings. The small meetings have been replaced by county or sectional county meetings where roads or travel habits make one county meeting impractical.

The larger county or sectional meetings offer an opportunity to prepare and present a much better program, and more people are effectively reached with much less time and travel expended.

Demonstrations such as the selection of breeding stock, culling, killing and picking, slack scald, caponizing, etc., of course, have to be continued on a local basis, because such demonstrations are not effective unless those in attendance actually take part in doing the work demonstrated and go home with the feeling that they are competent to continue the work on their own farms.

Twilight meetings held at farms where a particularly fine piece of work is being done, or where the recommendations of a program are being effectively carried out, have proved very popular during the summer months.

State and county poultry field trips carefully planned to show work in progress or new practices on trial have been a very effective method of teaching.

When two or more meetings of the same nature are held in the county within a reasonably short period of time, it has been found effective to send out the same notice to the entire county poultry mailing list, giving the time and place of each meeting held. It has been found that poultrymen will frequently attend the meeting in a section other than their own because of the conflict in time, the desire to visit a particular poultry farm where a demonstration may be held, or a desire to contact particular individuals who they think may be present. This practice is also a distinct saving of labor from the standpoint of the Farm Bureau.

In my opinion, a successful extension program depends on, first, surveying the field and consulting poultry committees and leading commercial poultrymen to identify a definite need; second, carefully working out a program to meet that need, using all available scientific and practical information in arriving at a solution of the problem.

A third element of success is planning a State and county program carefully with provisions for adequate publicity to reach every poultryman in the State, and a division of responsibility reaching down through the county Farm Bureau and county poultry committee organizations so that each person involved will have a particular responsibility and a feeling that the success of the project depends on his personal activity.

Last, but not least, adequate ways and means must be set up for measuring accomplishment at the end of the first year or period so that proof of the value of the program may be available for use in the continuation of the work.

New Federal Land Bank Policy Favorable to Poultrymen

Recent farm-credit legislation, authorizing the Land Bank Commissioner to make farm purchase loans to part-time farmers on the basis of prudent investment value as well as the strictly agricultural value, affects suburban poultry farms where a considerable part of the value is in the buildings. If the poultryman has some other dependable source of income in addition to his poultry enterprise a larger proportion of the value of the buildings may be loaned than formerly.

Farm Credit Notes, Vol. 1, No. 4.

REGIONAL CONFERENCES OF POULTRY SPECIALISTS

Three regional conferences of poultry specialists were held early in 1936, one at Jackson, Miss., February 3 and 4, one at Boston, Mass., February 19 to 21, and one at La Fayette, Ind., March 19 to 21. Each State had one or more representatives present, with the exception of Arkansas, Oklahoma, and Texas. The three conferences were quite different in tone and subjects, as would be expected when considering the variation in personnel and systems of poultry raising.

We were pleased to have Berley Winton attend all three sessions and discuss the National Poultry Improvement Plan. Mr. Winton has been very busy getting the plan under way. W. D. Termohlen, chief of the poultry section of the Agricultural Adjustment Administration, also attended all three conferences. At the southern and central conferences he discussed the functioning of poultry councils while at the New England conference he discussed a broiler marketing and production study which is being carried on in this section. Mr. Winton and Mr. Termohlen both have had several years' extension experience.

The Southern States conference had no formal program, the dominant theme being the regional adjustment program that had been suggested by the planning division of the Agricultural Adjustment Administration. Certain basic data regarding the poultry industry in the South were brought by each specialist, and with this information on the blackboard before us the true situation of poultry in the Southern agricultural program could be more easily evaluated. It was the consensus of opinion that the recommended 25 percent increase in poultry was a little high when the present low egg production per unit was considered. The specialists prefer to concentrate more on increased efficiency and higher production than upon any general poultry expansion.

The two-day extension conference preceded the meeting of the Southern Agricultural Workers Association. The poultry section this year gave an unusually strong program and credit for getting together this program is due Clyde Ingram of Louisiana. He is turning the reins of this section over to other hands next year and we trust that they will carry on the good work.

Many poultry specialists in the South have been spending a large part of their time on crop adjustment programs and this conference was particularly timely because they are just now getting back to extension teaching in poultry subject matter.

The Boston meeting was entirely different from the southern meeting in that the specialists had practically all been together only a few weeks previously in New York City, but there they had considered the poultry industry rather than extension work. The formal program had been prepared by the

general program committee. Research workers from outside the Extension Service made valuable contributions. Dr. Misner of New York discussed "The Income Approach in Developing a Poultry Program" by giving the results of poultry farm-management surveys, then illustrating and amplifying certain points with extension applications. Mention should also be made of the paper by J. C. Taylor on "A Forward Looking Program for 4-H Club Members." The disease-control program brought out the most discussion of any of the subjects.

The poultry specialists of the Central States had not been together since 1927. The program was prepared by a committee of poultry specialists composed of Alp, Cray, Hayes, and Weisner, and in my estimation was outstanding in the amount of attention that was given to extension methods. One afternoon was devoted to the poultry-disease-control programs and one session to the quality-egg program. The sessions moved along smoothly even to the late-hour discussions on redistribution of wealth.

These three conferences, coupled the getting-acquainted process of the new specialists with the exchange of materials and information of the older specialists, will undoubtedly result in more efficient poultry extension work. It is hoped that a regional conference in the Western States can be planned in the near future.

* * * * *

The conference on the National Poultry Improvement Plan held in Chicago, May 25 to 29, was not announced as a poultry specialists' conference, yet there were present 28 poultry specialists from 26 different States. Several of the specialists act as supervisors for the plan and were the official representatives at the conference; others accompanied their State colleagues to the meeting. The Extension Service plays a very important part in the educational work of this improvement program and at the request of Bureau of Animal Industry officials, a paper on this subject was prepared by the writer. This paper will be included in the mimeographed proceedings of the national conference.

There has been some talk of arranging a breakfast at the International Baby Chick Association convention this summer. More details concerning this will come later.

CENTRAL STATES REGIONAL EXTENSION CONFERENCE,
LA FAYETTE, IND., MARCH 19-21, 1936

REPORT BY PROGRAM COMMITTEE OF POULTRY SECTION*

This conference was, in our opinion, one of the most stimulating which we have ever attended. It was the objective of the program committee to eliminate subject-matter topics and to spend the full time of each sectional session on teaching devices, extension methods, project materials and aids, and progress reports on specific projects.

Assignments made to the various State representatives called for a brief discussion of the topic without formal presentation of a written paper. Largely because of this arrangement, each session resulted in a discussion period, with all persons present taking an active part in the program. Each specialist had been contacted by mail several weeks in advance of the conference, for the express purpose of getting individual suggestions as to the type of material to be included in the program.

The significant items discussed during the conference are indicated in the following summary of the daily sessions.

(Thursday A. M.) The conference opened with a discussion of the National Poultry Plan and its effect on extension programs. Berley Winton of the United States Department of Agriculture, for a number of years an extension poultryman in Missouri, presented the status of the Plan. This plan affects directly and indirectly the poultry extension workers in all States in which it is being carried out.

* H. H. Alp, Illinois, chairman; R. E. Cray, Ohio; O. J. Weisner, South Dakota; J. B. Hayes, Wisconsin.

It was unanimously agreed that poultry extension workers could well afford to spend sufficient time in connection with this program to make the poultry people of the various States familiar with the objectives of the plan.

Considerable interest was manifested in the use of county poultry committees, or subcommittees of county agricultural planning committees, as a means of planning and conducting an effective extension program. There seemed to be general agreement that the use of such committees would have a tendency to coordinate poultry extension programs with other county agricultural activities, and that the programs would be more interesting and progressive within a county.

Opinion differed as to the value of farm poultry records when considered as an extensive major long-time project. It was apparent from the discussion that the value of a project of this kind would vary with States, and that record work would be the most effective in those areas needing proof of the importance of poultry as a source of farm income, and of the value of result demonstrations

Campaigns were recognized as a means of solving certain types of special problems, particularly problems involving a few simple practices. Indiana has effectively used the campaign method in connection with its grow-healthy-chick project.

Specialized schools, such as the five-week schools conducted in Ohio, were considered very effective and best adapted as an advance project in commercial poultry areas.

The central theme of the 4-H Club discussion was that the club projects in poultry must be of sufficient size and importance to interest the modern boy and girl. A definite suggestion which was made and agreed upon as being worth while was that subject-matter schools might be conducted for club leaders.

(Friday A.M.) The use of radio and visual educational devices such as film strips, exhibits, models, news stories, circulars, etc., were discussed. Mr. Graham of the United States Department of Agriculture, contributed to the discussion by stating that it is difficult to measure the value of any of these aids separately, and that they should probably be considered as all being important in modern extension teaching.

States in which considerable use has been made of the radio and film strips reported that they must be well prepared to be effective, particularly the radio. Auditions for faculty members were suggested, along with the use of trained script writers, these two items being important in the preparation of material both interesting and pleasant to hear. The emphasis in the use of film strips was placed on the need for experienced photographers in securing the pictures, and that each picture should be singular and specific in subject matter. Inferior projectors were considered ruinous to the successful use of film strips.

It was of interest to learn that some of the States were using trained artists in connection with their publication material both in mimeograph and circular form. The States using the trained artists felt that they were very helpful in taking much of the educational literature out of the drab and unattractive classifications.

(Friday P. M.) There was plenty of discussion and it was pointed and emphatic. The conclusion reached was that owing to the serious lack of factual information on poultry diseases and parasites, very little could be done in formulating an effective extension program in poultry disease and parasite control. From a report of the 13 States represented it was shown that the total amount of time being spent on poultry disease research amounted to only the equivalent of five full-time research workers.

In view of the fact that these 13 States represent fully 50 percent of the poultry population of the country, it looks as if the amount of time and money being spent on poultry disease research is insignificant compared with the importance of the problem.

The mortality problem is undoubtedly the most serious problem confronting the poultry industry, and with the great lack of information concerning it, extension workers are definitely limited in the assistance they can render the industry. The use of trained pathologists was considered essential in the holding of clinics, otherwise clinics would do more harm than good.

(Friday Evening) Following a tasty meal of Indiana broilers, LeRoy L. Jones, a former extension poultryman, talked on "Poultry Extension Work as I Now See It." Jones indicated that in his opinion extension workers in poultry husbandry need to eliminate petty projects and to do something on the poultry mortality problem. A general discussion followed this talk, with brief comment from Dr. Card, University of Illinois, and Professor Carrick of Purdue.

(Saturday A. M.) This session was devoted to the discussion of egg marketing with the chairman calling for brief reports from most of the State representatives. These reports indicated that conditions within States largely limited the type of program followed. Contributions to this discussion were made by W. D. Termohlen of the United States Department of Agriculture and E. R. Menefee of Purdue. Mr. Termohlen, as well as Mr. Menefee made the suggestion that more consideration might be given to the use of home markets.

Conclusions

All members of the poultry section of the conference were quite enthusiastic as to the value of this type of meeting. They were agreed that it affords an opportunity to exchange ideas and to make improvements in State programs, and that the benefits to be derived from a sectional meeting of this kind would justify its being made a biennial event.

GIVING THE CONSUMER WHAT HE WANTS FOR HIS THANKSGIVING DINNER*

By

E. Y. Smith,
Cornell University, Ithaca, N.Y.

It has been said that any marketing problem is more than half solved when we have produced what the consumer wants.

Until recent years we have had no serious turkey marketing problem, at least not here in the East. The main problem has been how to produce enough turkeys to supply the demand.

In 1920 the United States turkey crop amounted to only about three and three-fifths million turkeys, but just nine years later it had increased to over sixteen and three-fourths million. The 1933 and 1934 crops were around twenty million, and I believe that the 1935 crop will be one of the largest that has been produced in America. Changes in method of reporting census figures makes it impossible to make accurate comparisons.

Our marketing problem is becoming more complicated and more important because of the increased competition due to greater production; also because the consumer is becoming more discriminating in the selection of the bird for his holiday dinner.

There are two classes of consumers whose wants the turkey growers should consider. These two classes are, first, the family consumers, that is, those who buy turkeys for the family dinner; and second, the restaurants, road houses, and hotels that use turkeys for sandwiches and meals. Turkey broilers are having a limited but an increasing use. Their use usually is limited to family and very high-class hotel and restaurant trade.

There are three reasons why it is relatively easy in New York State to determine fairly accurately just what our consumers want.

First, New York comprises a portion of a vasty turkey-consuming area.

Second, we have several hundred producers who keep records and cooperate very closely with the college of agriculture.

Third, our producers sell most of their turkeys directly to the consumers, or to retailers, which removes the growers only one step from the consumer.

* Presented at Poultry Science Assn. meeting, August 1935.

I will not be able to support by purely statistical data all the opinions expressed and the conclusions drawn in this paper. These opinions and conclusions are based on the following:

1. Reports from cooperators in the New York State turkey campaign. (This is a definitely enrolled group of producers who keep records.)
2. A survey of about 300 farm-turkey-raising enterprises.
3. Field observations made in connection with annual turkey killing, grading, and dressing demonstrations.
4. Contacts with the Marketing Committee of the New York State Turkey Association.

When the Crop is Marketed

Last year's reports from the turkey-campaign cooperators indicate that 50 percent of the market turkeys were marketed at Thanksgiving time, 36 percent at Christmas, and only 14 percent at other times. This 14 percent includes those that were sold early in the fall, those late-maturing birds that had been held over until after the New Year, and discarded breeders that were disposed of during and after the breeding season the following summer. These data indicate that the turkey is still chiefly a holiday bird.

How the Crop Was Sold

These records also indicated that 41.9 percent of the crop was sold alive, and that 58.1 percent was sold dressed. The 58.1 percent includes those turkeys sold dressed but undrawn; also those sold drawn and with the tendons pulled. These figures also indicate an increase in the percentage of birds sold alive, and a decrease in the percentage of those sold dressed, over similar figures taken from similar growers' records for the two previous years.

Turkey Survey of 1933 Marketing Practices

In an attempt to get further information on the 1933 market conditions and practices survey blanks were mailed to 300 turkey producers in New York State. Seventy-two, or 24 percent of these blanks were filled in and returned.

To Whom Sold

These data indicated that on an average, 30.2 percent of these 72 growers, sold their turkeys directly to consumers, 52.3 percent to retailers, and only 17.5 percent were shipped or sold to commission houses. Since 82.5 percent of their entire crop of market turkeys was sold either directly to the consumers or to the retailers, which removed the producers only one step from the consumer, they had a very excellent opportunity to study the consumers' preference. It should be remembered, however, that most of these turkeys were marketed for family use.

Skin Color Preference

As to the color of skin preferred, 3.2 percent of the 72 reporting producers stated that the white-skin birds were preferred; 53.2 percent gave the yellow-skin birds preference; 25.8 percent stated that customers had no actual skin-color preference when the carcasses were well finished and carefully dressed; and 17.8 percent of the 72 growers who returned the survey blanks didn't answer this particular question.

At first glance this shows a rather decided preference for birds with yellow skins. However, I am not sure whether the 53.2 percent that preferred the yellow skin were actually so interested in the yellow skin as the high finish of the birds which may have been indicated by the yellow skin. For instance, when a customer requested a yellow-skin bird, isn't it probable that she did it as much because it connoted good finishing to her, as for any actual skin-color preference?

Size Preference

The purpose of the next part of the survey was to determine the size of the bird generally preferred.

In this survey we classified the birds according to size as follows: Small (8-10 pounds); medium (11-14 pounds); and large (15-20 pounds). The producers were asked to rank these sizes as first, second, and third choice, according to the customers' demands for their birds that year.

Of the 72 producers who returned the survey sheets, 9 did not answer this question. They may have kept no record of size preference or they may have found no significant preference for any one size over another.

Fifteen of the 63 producers who answered this question listed the size that sold best but did not indicate a second and third choice. In summarizing these data on size preference we have given the first choice a value of 3, second choice a value of 2, and the third choice a value of 1. On this basis the weighted average preference is 243.5 for the medium, 176 for the small, and 150.5 for the large.

It is interesting to note that 35 growers listed the medium size as being the best seller, while only one listed it as the poorest. Fifteen listed the small as being the best seller and 13 listed it as being the poorest. Only 5 growers found that the large turkey sold best, while 18 found that it sold poorest. In other words, regardless of how we handle these data, the results are the same; that is, our New York State turkey producers find that the medium-sized bird is the best seller, the small bird the second best, and that the large-sized bird does not enjoy so much demand for the retail trade, which after all is the trade that pays most per pound for turkeys.

Conclusions

The yellow-skin turkey carcass is more or less preferred, but the preference may not be so very significant.

There is a distinct preference for the medium-to-small carcass for the family use, at least. This assumes, of course, that the various sizes are of similar type and equal in quality and finish.

Most, but not all, hotels and restaurants prefer the large bird.

* * * * *

BROODING DATA ON SEXED AND STRAIGHT-RUN CHICKS

Type of chicks brooded	No. farms cooperating	No chicks brooded	No. Died (8 wks)	Percent died (8 weeks)	Number pullets matured	Percent pullets matured	Cost per pullet (8 weeks)
Straight-Run	26	25,896	1,528	5.9	12,210	47.1	30.4¢
Sexed	11	10,116	314	3.1	8,883	87.8*	39.5¢

*Percent on basis of Straight-run day old chicks 43.9

W. D. Buchanan - 1935 Washington Annual Report.

SUMMARY OF REPORTS ON DEMONSTRATION FARM FLOCKS
(As furnished by 25 States)

November 1, 1934 - October 31, 1935.

State	Farms	Average size of flock	Eggs per hen	Mortal-ity	Feed cost per hen	Total income per hen	Feed cost per doz. eggs	Selling price per doz. eggs
	Number	Number	Number	Percent	Dollars	Dollars	Cents	Cents
Ariz. ^{1/}	6	77	137	----	1.41	3.66	----	----
Ark.	39	129	163	----	1.47	----	11.09	22.8
Conn.*	77	403	169.6	12.2	----	----	----	----
Del.	9	701	158	27 ^{3/}	1.83 ^{2/}	----	16.5	28.4
Fla.*	37	470	163.0	20.4	----	----	----	----
Ind.	122	261	140	18	1.01	----	8.7	17.5
Iowa	27	303	124	14.7	1.90	3.88	----	----
Kans.*	408	177	164.4	----	----	----	----	----
Ky.	73	105	143.9	----	2.37	----	----	----
Md.	75	294	152	18	----	----	----	----
Minn.	60	244	162	----	----	----	----	----
Mo.	221	157	147.5	----	1.92	3.44	16	23
Mo.	30	561	155.3	----	1.96	3.59	15	24
Mont.	25	175	164.6	18	1.40	----	12	25
Nebr.	13	247	144.5	12.5	2.04	4.40	----	25.9
N. H.*	210	593	166.9	14.14	----	----	----	----
N. C.	156	185	157.5	----	1.80	----	14.8	28
Ohio	99	258	147.3	22.5	----	----	12.8	25.8
Okla.	139	111	146.7	----	1.37	----	----	22.5
Pa.	240	---	166	----	----	----	----	----
S. C.	64	151	147	21	2.28	4.23	----	26
Tenn.	67	95	125.1	20.8	1.92 ^{2/}	3.58	18.3	24.7
Texas	1,151	91	----	----	----	----	----	----
			(179 ^{4/}	14.4	1.53	----	10.3	21.8
			(156 ^{5/}	22.1	1.68	----	12.9	22.2
Utah*	136	669	153.4	31.6	----	----	----	----
Va.	40	---	153.4	----	----	----	----	----
Wis.*	100	208	168.8	19.15	1.59	3.65	11.24	24.15

*October 1 to September 30.

^{1/} 4-H Poultry Club project.

^{2/} Includes feed for raising young stock.

^{3/} Percent of original layers died or missing.

^{4/} White Leghorns only.

^{5/} All other breeds.

The Comparative Cost of Producing Duck Eggs
and Chicken Eggs - Dayton, Ohio, State Hospital.

	<u>Ducks</u>	<u>Chickens</u>
Ave. number of birds for the year (1935.	195	203
Ave. production of eggs per bird.	201.5	161.0
Feed cost per bird.	\$2.63	\$1.34
Feed cost per bird (including feed cost of young stock). .	4.70	2.79
Feed cost per dozen eggs . . . . .	.15	.10
Feed cost per dozen eggs including young stock . . . . .	.28	.20
Ave. price received per dozen . . . . .	.27	.27
Cash receipts per bird	5.15	3.65
Cash receipts per bird including young stock	6.26	5.52
Cash returns above feed	2.52	2.31
Cash returns above feed including young stock	1.56	2.73
Labor income per bird (ave. no. of birds).	2.12	1.75
Labor income per bird (beginning no. of birds)	2.01	1.69
Feed cost per bird housed	1.01	0.99
Miscellaneous cost per bird housed. . . . .	.34	.43
Receipts per bird housed . . . . .	.54	1.27
Net cost per bird housed . . . . .	.81	.15
Flock reductions: mortality and culling, percent	10.7	68.5

Turkeys have been raised at several State institutions in order to provide Thanksgiving meals for the inmates. These projects have afforded an excellent opportunity for the Extension Service to conduct field demonstrations on various practices in poultry management. Through close co-operation with Mr. Bragg and superintendents of the institutions as well as poultrymen in charge of the various plants, it has been possible to make accurate measurements of results obtained from various practices adopted.

Ohio Poultry Specialist's Annual Report -
1935.

1934-35 NEBRASKA FLOCK-TESTING PROJECT.

Item	12 Flocks, heavy breeds	15 Flocks, W. Leghorns
Fertility of eggs,* spring of 1934, percent	87	87
Hatchability of eggs, spring of 1934, percent	63	73
Chicks lost the first 4 weeks, percent.	39.2	9.0
Ave. weight of 10 average chicks at 12 weeks, ounces.	19.3	15.5
Number of pullets per entry at 5 months	14	26
Average weight of pullets at 5 months, pounds	3.13	2.82
Number of pullets in entries at beginning of project.	107	84
Number of pullets in entries at finish of project	66	64
Number of 200-egg hens	6	34

* 100 eggs from each flock; hatched at Lincoln, chicks brooded and reared at North Platte.

QUALITY EGG MEETINGS

H. H. Alp, Poultry Specialist in Illinois, reports a meeting which he states "was definitely responsible for creating an egg-quality consciousness in many progressive flock owners in southern Illinois." This meeting was held on Tuesday, July 23, 1935. The previous Friday these flock owners had carefully candled their eggs and made shipments to the New York market. Dr. Huttar of the Grange League Federation took random samples of each shipper's eggs when they arrived at the New York market on Monday. With these samples he then made a trip by aeroplane back to Illinois and was able to show each shipper the eggs just as he would have shown them to a customer in New York City on Tuesday. According to Mr. Alp, "This demonstrated to these particular shippers the decrease in quality and convinced them that proper handling methods were necessary on the farm in order to maintain top quality."

SUMMARY OF NEW JERSEY'S "ECONOMY-IN-POULTRY-PRODUCTION PROJECT"

A definite program of recommendations which were felt to be fundamental to the solution of the problem were agreed upon and formed the basis of the extension project known as the "wage war on worms and disease" campaign. Seven points were considered fundamental to the success of any pullet-raising venture. These points, based primarily on sanitary management, are as follows:

1. Hatch or purchase chicks early (before May 15).
2. Keep brooder houses clean.
3. Provide clean range.
4. Keep old and young stock separate.
5. Build a fly-screened manure shed for the safe storage of poultry droppings.
6. Wire the dropping boards of adult coops with 1 1/2-inch mesh wire of 16 gage.
7. Clean the dropping boards daily.

REPORTS BY YEARS

Year	Individuals reporting	No. chicks reported	Percent mortality	Percent good pullets housed
1928	230	299,491	18.6	36.0
1929	548	834,802	17.3	30.7
1930	705	1,105,543	14.9	37.8
1931	702	979,844	12.7	37.5
1932	747	1,132,284	13.4	38.2
1933	734	1,066,533	13.3	38.2
1934	838	1,100,253	12.2	38.3

Our present conception of proper brooding and rearing methods is threefold. First, we should aim to provide a sanitary environment for our growing birds. Second, we should aim to develop, through careful feeding, birds whose natural resistance is always maintained at the uppermost level. Third, the poultryman must be ever alert to correct, by close observation and careful management, those situations which develop because of the changing requirements of growing birds.

Leslie M. Black, New Jersey- Vol. 22, No. 2, Hints to Poultrymen.

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June 1935 (Ex. Cir. 49), Moscow, Idaho.
- Common Parasites of Poultry, H. C. Gauger and R. S. Dearstyne, 11 pages,
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M. W. Emmel, 24 pages, illus., (Bull. 293), March 1936, Gainesville, Fla.
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Poultry Housing, F. L. Knowlton and others (Bull. 480), Corvallis, Ore.

Yarding Systems and Crop Rotations for Poultry Farms, Howard B. Sprague, 12 pages, (Exp. Sta. Cir. 357), June 1935, New Brunswick, N. J.

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Air Conditioning Eggs, C. M. Ferguson, 4 pages, illus., (Poultry Pointers No. 25), May 1935, Columbus, Ohio.

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Producing Profitable Pullets, C. E. Harris, 16 pages, illus., (Poultry Leaflet No. 4), February 1935, Lexington, Ky.

Quality Eggs, J. H. Vondell, 12 pages, illus., (Leaflet 160), October 1935, Amherst, Mass.

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(Only U. S. D. A. publications are available from the Department at Washington. In most instances others can be obtained from the institution or agency issuing them).

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INTERMITTENT FEEDING FOR CHRONIC COCCIDIOSIS

"Eight poultrymen in one county cooperated in demonstrating the value of controlling chronic coccidiosis by the intermittent feeding schedule. The results were satisfactory on all the farms. On one farm there were approximately 800 pullets three months of age which were severely affected with the disease. Although the agent was not entirely hopeful as to the recovery of the flock, the situation was discussed with the owner and the intermittent feed schedule recommended. The flock was culled, and the feeding schedule maintained. The pullets recovered and are now laying at better than 70 percent.

"On Monday and Wednesday in place of the regular grain feed in the morning, the birds were given a feed of coarse bran which had been moistened with water or skim milk. As much of this moistened bran as the birds would consume in 15 or 20 minutes was fed. At 10 a.m. dry mash was fed, giving the birds a sufficient amount to last until 2 or 3 p.m. At the regular feeding hour, in the evening, the hard grain was fed."

W. D. Buchanan, 1935 Washington Annual Report.

